

## REMARKS

### A. Status of the Claims

Claims 1-25 were previously pending. In the present response, Applicants have canceled claims 1-25 and submitted new claims 26-49. Claims 26-49 are now pending. Of the new claims, claims 26, 32, 38, and 44 are independent.

### B. Summary of the Final Office Action Mailed July 16, 2008

In the Final Office Action mailed July 16, 2008, the Examiner: (i) rejected claims 1-3, 8-10, 15-17, and 22-25 under 35 U.S.C. § 103(a) as allegedly obvious over the combination of U.S. Patent 6,014,659 to Wilkinson ("Wilkinson") and U.S. Patent 6,513,0228 to Lee ("Lee"); and (ii) rejected claims 4-7, 11-14, and 18-21 under 36 U.S.C. § 103(a) as allegedly obvious over the combination of Wilkinson, Lee, and U.S. Patent 6,826,561 to Cao ("Cao"). Applicant thanks the Examiner for the thorough examination, and Applicant responds to the rejections as follows.

### C. Response to the § 103(a) Rejections

Without conceding the merits of the § 103(a) rejections, and in an earnest attempt to advance prosecution, Applicants have canceled previously pending claims 1-25, and Applicants have presented new claims 26-49. The subject matter of claims 26-49 is supported throughout the specification, including, but not limited to, the following sections: (i) page 4, line 23 - page 5, line 14; (ii) page 6, line 10 - page 17, line 16; and (iii) Figs. 2-6. Applicants submit that new claims 26-49 are patentable over the combination of Wilkinson, Lee, and Cao for at least the reason that the Wilkinson-Lee-Cao combination fails to teach or suggest each recited claim element, and thus, any § 103(a) rejection based on Wilkinson, Lee, and Cao would necessarily

lack the factual underpinnings required by law to establish prima facie obviousness as set forth in MPEP § 2142.

1. **Wilkinson does not teach or suggest “searching the data for an iterative search result using a subsequent key comprising the subtree index found in a preceding search and at least a next portion of the first key.”**

Wilkinson discloses a method and system for “conducting a reduced length search along a search path.” (Wilkinson, col. 5, lines 27-28.) Wilkinson’s disclosed system “uses the address or address fragments...to directly access memory.” (Wilkinson, col. 8, lines 2-4.) “Intermediate results fetched from memory 50 are processed...and are used, in conjunction with the address...to access further intermediate results and ultimately the final result.” (Wilkinson, col. 8, lines 4-8.) However, the Non-Final Office Action states, and Applicants agree, that “Wilkinson...fails[s] to...teach a partial index feedback loop by which a series of mappers is indexed in multiple passes with multiple successive portions of the search key.” (Office Action, p. 3.) Accordingly, Applicants submit that Wilkinson fails to teach or suggest “searching the data for an iterative search result using a subsequent key comprising the subtree index found in a preceding search and at least a next portion of the first key,” as recited in claim 26.

2. **Lee does not teach or suggest “searching the data for an iterative search result using a subsequent key comprising the subtree index found in a preceding search and at least a next portion of the first key.”**

Like Wilkinson, Lee also fails to teach or suggest the recited claim elements. In contrast to claim 26, Lee discloses systems and methods “for searching a list of entries when search criteria is provided for less than all of the fields of the entries.” (Lee, col. 1, lines 33-35.) “[I]f search criteria is provided for less than all of the fields, then multiple search keys will be generated such that each generated search key includes a search value for each field.” (Lee, col.

3, lines 44-47.) Then, “a search operation is executed after generating the search key for the search operation[, and] a feedback entry in the list is received in response to the search operation.” (Lee, col. 3, lines 60-63.) “The feedback entry is processed to determine a next search key to use in the next search operation.” (Lee, col. 3, lines 63-65.) “[P]rocessing...the feedback entry to determine the next search key comprises determining a next possible entry in the list that would immediately follow the feedback entry in the list according to the ordering of the entries in the list[, and] [t]his determined next possible entry is used as the next search key.” (Lee, col. 3, line 66 - col. 4, line 4.)

Lee’s “next search key” does not amount to Applicants’ claimed subsequent key for at least the reason that Lee’s “next search key” does not comprise “the subtree index found in a preceding search and at least a next portion of the first key.” Instead, Lee’s “next search key” is the “next possible entry in the list that would immediately follow the feedback entry in the list according to the ordering of the entries in the list.” (Lee, col. 4, lines 1-3.) For at least the reason that Lee fails to disclose the claimed “subsequent key,” Applicants submit that Lee fails to teach or suggest “searching the data for an iterative search result using a subsequent key comprising the subtree index found in a preceding search and at least a next portion of the first key,” as recited in claim 26.

**3. Cao does not teach or suggest “searching the data for an iterative search result using a subsequent key comprising the subtree index found in a preceding search and at least a next portion of the first key.”**

The Non-Final Office Action cites Cao as teaching the use of 32-bit IPv4 addresses and 128 bit IPv6 addresses as search keys. (Office Action, pp. 5-6.) Applicants’ review of Cao found no teaching or suggestion of “searching the data for an iterative search result using a

subsequent key comprising the subtree index found in a preceding search and at least a next portion of the first key,” and the Office Action does not cite Cao as teaching this claim element. Accordingly, Applicants submit that Cao also fails to teach or suggest “searching the data for an iterative search result using a subsequent key comprising the subtree index found in a preceding search and at least a next portion of the first key,” as recited in claim 26.

**4. Claims 26-49 are patentable over the Wilkinson-Lee-Cao combination.**

Because Wilkinson, Lee, and Cao, whether considered individually or in combination, fail to teach or suggest “searching the data for an iterative search result using a subsequent key comprising the subtree index found in a preceding search and at least a next portion of the first key,” Applicants submit that any rejection of claim 26 based on Wilkinson, Lee, and Cao would necessarily lack the factual underpinnings required to establish *prima facie* obviousness under MPEP § 2142. Therefore, Applicants submit that claim 26 is non-obvious and allowable over the combination of Wilkinson, Lee, and Cao for at least this reason.

Additionally, because claims 32, 38, and 44 recite elements similar to those recited in claim 26, Applicants submit that claims 32, 38, and 44 are allowable over the combination of Wilkinson, Lee, and Cao for at least the same reasons as claim 26. Applicants further submit that (i) claims 27-31, (ii) claims 33-37, (iii) 39-43, and (iv) 45-49 are likewise non-obvious and allowable over Wilkinson, Lee, and Cao for at least the reason that they depend from allowable claims 26, 32, 38, and 44, respectively.

**D. Conclusion**

Applicants submit that the present application is in condition for allowance, and Applicants respectfully request notice to that effect. If the Examiner feels that further dialog would advance the application to issuance, the Examiner is invited to telephone the undersigned at (312) 913-0001.

Respectfully submitted,  
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